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Application of the Principle of Prudence in the Accounting of Slovak Businesses through the Creation of Adjusting Entries for Receivables

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Abstract

The primary principle of accounting is true and fair view of all the facts subject to the accounting. The fair presentation is ensured through the compliance with the principle of prudence. This principle means that, at the balance sheet day the entity takes into account the expected risks and losses related to assets and liabilities; and that are known at the balance sheet date. The expected risks and losses are reflected in the accounting through provisions and adjusting entries. The adjusting entries are created when the transitional impairment of assets takes place.

The paper deals with the issue of creation of adjusting entries for receivables in the Slovak enterprises in terms of taxation and accounting. The adjusting entries for receivables must be created if it is reasonable to assume that the debtor is unable to pay the full amount or part of it. We will analyse and examine the importance of adjusting entries, difficulties in creating adjusting entries for receivables and their impact on economic performance of selected companies. In the research part of the paper will be used appropriate mathematical and statistical methods and based on the results of the research evaluation conclusions and suggestions will be drawn.

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1. Introduction

A receivable can be defined as the creditor's (legal entity or an individual) claim to receive cash or in kind from the debtor. In the moment when there is a right of the creditor to fulfil receivable, the debtor will be obliged to fulfil the payable. The Slovak *Civil Code no. 40/1964 Coll.* (8th part) in the § 488 it regulates the rights of obligations as follows: obligation relationship is a legal relationship from that the creditor is entitled to a performance (a receivable) from the debtor and the debtor is bound to fulfil its obligation (payable). The valid obligation obliges the debtor to give something, to act on some way, to forbear from doing something or to suffer something; and the creditor is entitled to require it from him. Under the *Commercial Code no. 513/1991 Coll.* the receivables are a part of the business assets.

The receivable (as it is stated in the *Act no. 431/2002 on Accounting*) is part of the business assets. In the Double Entry Bookkeeping it is recognized on the asset side of the balance sheet. The creation of the receivable on the creditor's side and the creation of the obligation (payable) on the debtor's side is a result of legal relationships concluded in written or oral form. By the creation of receivable the movements of assets take effect – their increase. By the discharge of receivable the movements of assets take effect – their decrease. The most common case of occurrence of the receivable within the business is based on the delivery of tangible assets – as: goods, properties, materials, products – or on the delivery of services. The accounting record of the creation of receivable is made with the date on which delivery took place. The receivable is discharged when the debtor pays, by receiving the payment in cash or on account by the creditor. Mutual settlement of receivables is also considered to be a form of payment. The receivable is discharged also by receiving the bill of exchange, while the discharged receivable is replaced with a bill of exchange receivable.

In the *Act no. 595/2003 on Income Tax* the term of receivables is not defined. It defines only the receivable attribution – interest on late payment, fees on late payment and other charges that raise the receivable due to late payment.

2. Material and Methods

The paper includes analysis of accounting and tax legislation governing the creation and the reversal of value adjustments to receivables. A detailed analysis is conducted in regard to the methods of valuation of allowances, to its accounting view, to the tax deductibility for income tax purposes and to its impact on the profit/loss of businesses. The paper also demonstrates on a practical example the method for calculating the amount of the creation of value adjustments for receivables taking into account the current value of the receivable, the amount of creation and reversal of value adjustments during five years in the selected company and its impact on the amount of profit or loss in the accounting during the reporting period. After that, there is conducted a survey on the amount of receivables and their value adjustments made up to 31.12.2014 in selected business entities and using the linear regression model is determined the relation between the value adjustments for trade receivables and their amount. Analyses are supplemented by syntheses that allow knowing the phenomena and their interrelations. The secondary data to analyse the essential features of the value adjustments have been found in scientific and professional books and journals, and in the accounting and tax legislation of the Slovak Republic. Primary data were obtained from the questionnaire survey on a sample of business entities. The research sample consisted of 20 randomly selected enterprises, with the rate of return of 55.5%.

3. Results and Discussion

3.1. Accounting Aspects of Value Adjustments to Receivables

The main objective of accounting is true and fair view of all the circumstances in the financial statements that are subject to accounting. Fair presentation is also provided through compliance with the prudence principle. Prudence means to proceed with some caution in decisions associated with the creation of the required estimates in such precarious conditions so that the assets (or income) are not overvalued and/or liabilities (or cost) are not undervalued (Tumpach, 2006, p.35).

Compliance with the prudence principle means that – at the date of preparing financial statements – the accounting entity takes into account the expected risks and losses relating to assets and liabilities and that are known at the date of the financial statements. Estimated risk of impairment is taken into account through the value adjustments to assets. This implies that the value adjustments are created also to receivables – at the balance sheet date – based on the reconciliation procedures, if it is reasonable to assume that the debtor is unable to pay the full amount of the receivable, or a part of it. We can state that the value adjustments are a category that adjusts the value of the receivable and that take into account the risk estimations of the entity, i.e. risk estimation that the receivable will be not paid in full.

Creation of the value adjustments is defined in the § 18 (1) of the Measure of the Slovak Ministry of Finance no. 23054/2002 (hereinafter referred to as the Accounting Procedures of Double-Entry Bookkeeping) as follows: “The adjusting entries shall be created based on the basis of the prudent principle in the case, if it is reasonable to assume that there was an impairment of assets compared to its valuation in accounting. The presumption of impairment of assets is justified if occurred the situation which gives the reason to estimate reduced future economic benefits from that asset. The value adjustment is recorded in the amount of justified assumption of impairment of assets compared to its valuation in accounting”.

In deciding on the creation of value adjustment for receivables the accounting entity proceeds as follows (Jarinkovičová, Turóciová, Jurišová, 2015):

- 1) checking, estimating the risk of non-payment of receivable,
- 2) recording the value adjustment in the amount of the estimated non-payment of receivable – in accordance with the methods of the § 18 of the Accounting Procedures,
- 3) assessing whether the created value adjustment has an impact on the income tax base.

The method of recording the value adjustments is individually customized for the creation of value adjustments and for the reversal of value adjustments. The settlement of value adjustments is linked to the matter that is the reason for the settlement of the value adjustment. The accounting procedures distinguish between two types of such matters, namely:

- disposals of assets, or
- complete or partial disappearance of a justifiable assumption of impairment of assets.

According to the Accounting Procedures, the value adjustment for receivables is recorded as follows (see Fig. 1.):

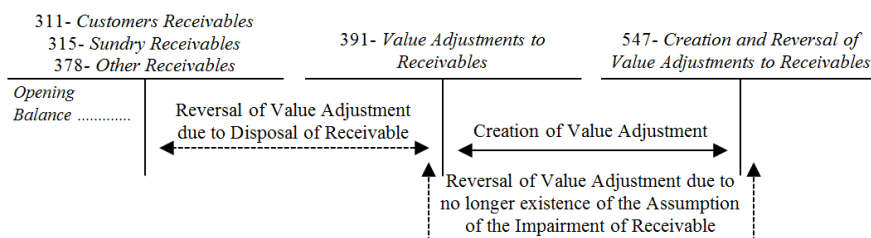


Fig. 1. Bookkeeping of the Value Adjustments on the Accounts (source: self-elaboration).

In creating value adjustments for receivables the Accounting Procedure are determining the reference values as:

- valuation in accounting,
- assumption of total or partial non-payment of receivables,
- the present value of receivables.

In creating value adjustments for receivables – when examining the impairment by comparing the book value and the present value of receivables – we can proceed as follows:

The company called “Creditor 1” recorded (at the date of 31.12.2014) in its accounts a long-term receivable related to a supply contract (recorded to the account 311-Customers Receivable) valued at 10,000 euros. According to the contract, that receivable will be paid by 31.12.2017. The contract does not provide any interest; we are talking

about property-related companies. The present value (PV) of the receivable (by the date of 31.12.2014) – in the case of an estimated interest rate of 10% – is calculated as:

$$PV = \text{discount factor} \times \text{value of the receivable in the accounting}$$

Discount factor – is a coefficient (k) calculated as:

$$k = \frac{1}{(1+d)^n} \quad (1)$$

where:

d – discount rate, which is derived from bank interest rate, taking into account the risks and losses of the company,
n – the year in which calculated the present value.

$$PV = \frac{1}{(1+0,10)^4} * 10,000 = 6,830 \quad (2)$$

By the date of 31.12.2014 there is created the adjusting entry for receivable in the amount of 3,170 euros (10,000 – 6,830).

3.2. Tax Aspects of Value Adjustments to Receivables

The Slovak Income Tax Act also allows to create value adjustments. It is one of the tax optimization tools. Value adjustments – whose creation is considered as tax expenditure, i.e. it affects the income tax base – are regulated in detail in the § 20 of the Income Tax Act. According to this law, the value adjustments whose creation is tax deductible expense are the value adjustments to:

- acquired assets,
- receivables that are not time barred,
- receivables from debtors in bankruptcy proceedings and restructuring proceedings,
- receivables that are not time barred, created by the banks and branches of foreign banks and the Export-Import Bank of the Slovak Republic,
- receivables from insurance – in the case of termination of the insurance – that are not time barred and that are created by insurance companies and branches of foreign insurance companies,
- health insurance receivables that are not time barred – except for receivables from public health insurance attributable to the income that is exempt from taxation by the income tax,
- receivables from person in the resolution procedure, that are not time barred.

The receivables that are not time barred, where there is a risk that the debtor will not pay them in total or partially and which were also included in the taxable income – if the time for payment expired longer than:

- 360 days – are included in tax expenses in the amount of 20% of the nominal value of the receivable or of its unpaid part without accessories,
- 720 days – are included in tax expenses in the amount of 50% of the nominal value of the receivable or of its unpaid part without accessories
- 1,080 days – are included in tax expenses in the amount of 100% of the nominal value of the receivable or of its unpaid part without accessories.

We can therefore conclude that under specified conditions the taxpayer is able to include into the tax expenses (i.e. reduce the tax base) also the value adjustments created to its own risk receivable, which was included in taxable income, and this can be done gradually up to 100% of the nominal value of the receivable or of its unpaid part without accessories.

The tax base will be increased by the taxpayer in the tax period in which will be satisfied the receivable.

Value adjustments created to other receivables do not fulfil the condition of the creation of tax deductible value adjustments.

3.3. Analysis of the Impact of the Creation and Reversal of Value Adjustments on the Amount of Profit or Loss of the Company

In the following, we will deal only with adjustment entries for receivables that are not time barred, where there is a risk that the debtor will not pay them in total or partially. The influence of the creation and reversal of value adjustments – in terms of accounting and taxation – is examined in selected companies called “Creditor 2” and “Creditor 3”.

In the company “**Creditor 2**” we monitored the overdue receivables and their value adjustments created in the period 2010 to 2014. The Company recorded only short-term receivables and the value adjustments are created only in accordance with tax regulations. We examined the impact of value adjustments on the amount of profit before tax.

Table 1. Value Adjustments to Receivables in the Years 2010-2014 (in euros) (source: self-elaboration).

Receivables	Receivables and value adjustments to receivables at balance sheet date (in EUR)				
	2010	2011	2012	2013	2014
The overall state of outstanding receivables, including:	403,267	198,292	310,146	625,954	915,564
- Risk overdue receivables up to 360 days	0.00	19,823	32,778	4,278	77,860
<i>Value adjustments created in the amount of 20%</i>	<i>0,00</i>	<i>3,965</i>	<i>6,556</i>	<i>856</i>	<i>15,572</i>
- Risk overdue receivables up to 720 days	13,705	0.00	15,170	855	3,330
<i>Value adjustments created in the amount of 50%</i>	<i>6,853</i>	<i>0.00</i>	<i>7,585</i>	<i>428</i>	<i>1,665</i>
- Risk overdue receivables up to 1,080 days	0.00	12,794	11,614	15,132	15,323
<i>Value adjustments created in the amount of 100%</i>	<i>0.00</i>	<i>12,794</i>	<i>11,614</i>	<i>15,132</i>	<i>15,323</i>
- Risk receivables in total	13,705	32,617	59,562	20,265	96,513
<i>Creation of value adjustments in total</i>	<i>6,853</i>	<i>16,759</i>	<i>25,755</i>	<i>16,416</i>	<i>32,560</i>
<i>Reversal of value adjustments due to disposal of receivables</i>	<i>3,291</i>	<i>4,653</i>	<i>96,429</i>	<i>19,478</i>	<i>44,531</i>
<i>Reversal of value adjustments due to no longer exists the assumption of the impairment of receivables</i>	<i>678</i>	<i>38,784</i>	<i>12,468</i>	<i>7,663</i>	<i>6,297</i>
The total amount of value adjustments to receivables at balance sheet date	6,175	-22,025	13,287	8,753	26,263

The value adjustments are created to the debit of expenses, thus having an impact on profit or loss. Their reversal caused by no longer existence of the assumption of the impairment of receivables is recorded in the opposite way to the creation.

Let's say that the company “Creditor 2” reaches – before recording the value adjustments – a constant profit before tax in each examined year – profit of 50,000 euros. Each creation of value adjustment is accounted for as cost increase, and it means that all the created value adjustments reduce the profit. The most significant reduction in profit due to the creation of value adjustments to receivables occurred in 2014, namely a reduction by 32,560 euros. The smallest reduction was in 2010, in the amount of 6,853 euros. The reversal of value adjustments (due to no longer existence of the assumption of the impairment of receivables) reduces the costs, and consequently the profit increases. The most significant increase caused by the reversal of value adjustments to receivables have been found in 2011 by an amount of 38,784 euros. A slight increase was in 2010 by an amount of 678 euros. The total amount of value adjustments for receivables (i.e. creating and reversal) increased the profit only in 2011, and it was in the amount of 22,025 euros. In the other years of the reporting period, the total amount of value adjustments reduced the annual profit. The greatest reduction was in 2014 by 26,263 euros and the lowest was in 2010 by about 6,175 euros (see Fig. 1.).

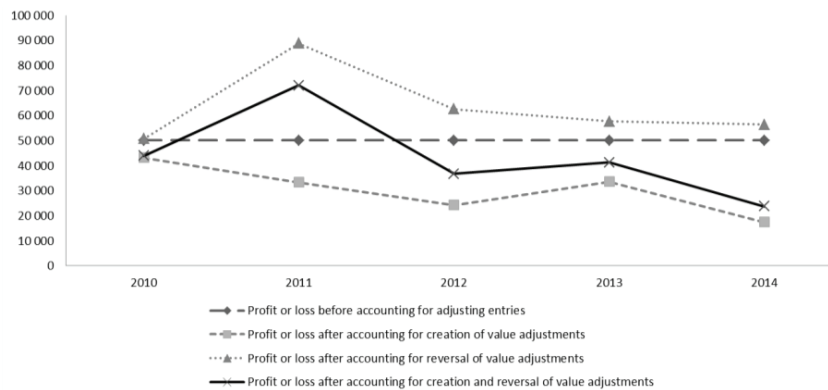


Fig. 2. The Impact of Value Adjustments to Receivables on the Profit Before Tax (in euros) (source: self-elaboration).

From the point of view of taxation, the company created only tax deductible value adjustments to receivables in the examined period, thus their creation reduces the tax base. It appears from this that the reversal of these value adjustments is also tax deductible, i.e. the reversal increases the tax base. Based on these facts, we can say that the overall impact of the creation and reversal of value adjustments affects the tax base exactly in the same extent as the profit before tax.

For this company we might suggest to continuously monitor the status of outstanding receivables and to send to the debtors the requests for payment, or it should also create internal guidelines which will prevent the formation of outstanding receivables longer than 360 days. This concerns for example to set the financial limits of issued invoices (which may have one customer in aggregate) or to limit the financial status of outstanding invoices at the end of the month. In the case of failing or exceeding this limit, the customer will not be able to purchase by invoice – only if he fulfils his payable at least partially – if he pays at least a part of the debt in the way that the total amount falls below the set limit.

The company “**Creditor 3**” creates the value adjustments to receivables (based on the regulation by internal directives) based on documents – these are for example the Minutes of the Meeting of the Committee for Receivables, a Document from the Court, a Document from the Administrator of the Bankruptcy Assets, etc. The value adjustments are created only to those receivables where the probability of payment is at least partial. If the payment is improbable, the receivable is written-off. When assessing the collectibility of receivables, the company proceeds individually for each receivable. The company creates adjusting entries to the long-term receivables in the amount of discounted value of expected future cash flows. Then, the value adjustment is quantified as the difference between the carrying value and the present value of the receivable.

We can say that the company is very responsible in the area of creation of value adjustments to receivables. The Company Management nominates the Committee for Receivables which investigates any disputable trade receivables. The Commission recommends to create a 100% adjusting entries for all the risk receivables – that increases or decreases the tax base.

On the last day of the accounting period (i.e. at 31.12.2014) the chosen company “Creditor 3” had in the balance-sheet the amount of receivables and value adjustments to receivables as it is shown in the Table 2.

Table 2. Receivables and the Amount of Value Adjustments to Trade Receivables (in euros) (source: selected item of the balance sheet of the company).

The amount of trade receivables at 31.12.2014	The amount of value adjustments to trade receivables at 31.12.2014
423,980	45,123

After that, we have conducted a survey using the questionnaire that examined the amount of trade receivables and the amount of created value adjustments to trade receivables by the date of 31.12.2014. The research sample consisted of 20 randomly selected companies with double-entry bookkeeping. There has been 55.5% of successfully filled questionnaires (it means 11 companies).

Table 3. Data from Questionnaire Survey – the Amount of Trade Receivables and the Amount of Value Adjustments to Trade Receivables (in euros) (source: self-elaboration).

No. of the receivable ordered by amount	The amount of trade receivables at 31.12.2014	The amount of value adjustments to trade receivables at 31.12.2014
1	3,455	2,337
2	29,009	7,468
3	30,275	4,695
4	46,876	2,023
5	66,123	10,612
6	90,029	628
7	116,771	10,835
8	145,788	2,963
9	187,435	17,903
10	196,240	15,987
11	224,152	21,558

Using a simple linear regression model we want to know whether the amount of value adjustments to trade receivables in the company “Creditor 3” (by the date 31.12.2014) follows the behaviour of individual companies surveyed in this area.

A simple linear regression model is expressed by the equation (Pacáková, 2003):

$$Y_i = A + BX_i + C \quad (i = 1, 2, 3, \dots n) \quad (3)$$

where:

Y_i – i^{th} observed value of dependent variable

A, B – unknown parameters of the regression model

BX_i – i^{th} value of explanatory variable

C – an unobserved random variable

n – the number of observations

The simple linear regression was performed using the Microsoft Excel. By the use of the function “Linest” we calculated a simple linear regression model for the dependence of the amount of value adjustments to trade receivables on the amount of the total trade receivables (by the date 31.12.2014). The equation of simple linear regression model is as follows:

$$Y_i = -883.6 + 0.097 X_i \quad (4)$$

The dependence of value adjustments to receivables on their total value (by 31.12.2014) in the individual companies is shown in the graph below (see Fig. 3.).

Substituting the data of the analysed company “Creditor 3” into the equation of simple linear regression model we found out that dependence of the amount of value adjustments on the total amount of trade receivables is similar to the examined companies – that provided us with relevant information on the amount of their trade receivables and on the amount of value adjustments to these receivables – i.e. it follows the behaviour of the companies surveyed by us.

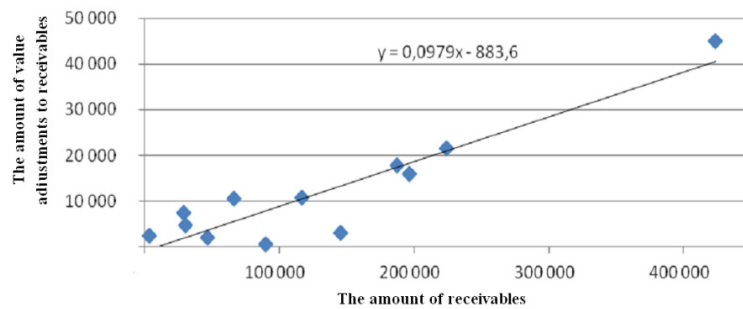


Fig. 3. Dependence of Value Adjustments to Receivables on their Total Value (by 31.12.2014) (source: self-elaboration).

4. Conclusion

A longer-term issue of the business environment is the delayed payment of invoices by the customer. The company must buy materials, pay employees wages, pay contributions to insurers, pay value added tax on goods and services supplied and also pay income tax by the deadlines provided by law, while the income from sales of supplied goods and services is delayed. This makes it difficult to undertake the financial situation of this companies, it can lead to secondary insolvency. To improve the payment discipline among companies and to facilitate the negative effects on creditors, the public authorities are adopting measures against the debtor. One of these measures gives the possibility to the creditors to create value adjustments to the unpaid receivables. But the creation of value adjustments is only a mitigation of the negative impacts of non-payment of customer invoices. By its creation the company only temporary excludes a part of the outstanding debts from the achieved profit and from the taxable income. But the problem persists and the company must continue to handle the situation.

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